

WE CLAIM:

- Sub 1
1. An apparatus for rapidly changing the temperature of a mass of product, comprising:
at least one input heat transfer element extending into the mass of product;
5 at least one output heat transfer element in thermal contact with the input heat transfer element and exposed to an ambient temperature environment to transfer thermal energy between the product mass and the ambient temperature environment.
 2. The apparatus of Claim 1 wherein said at least one input heat transfer element defines a plurality of product contact fins and said at least one output heat transfer element defines a plurality of air contact fins.
 3. The apparatus of Claim 1 further comprising a lid for use on a pan containing the mass of product, the lid having at least one slot therein, said at least one input heat transfer element passing through said slot.
 4. The apparatus of Claim 1 wherein the mass of product is in a pan, the pan having a bottom, said at least one input heat transfer element contacting the bottom of the pan.
 5. The apparatus of Claim 1 wherein the at least one input heat transfer element is detachable from said at least one output heat transfer element.
 6. The apparatus of Claim 1 wherein the at least one input heat transfer element and at least one output heat transfer element are formed of a material selected

from the group consisting of aluminum, stainless steel,
cast iron and copper.

7. The apparatus of Claim 1 wherein the at least one input heat transfer element and at least one output heat transfer element are formed as a unitary body.

8. The apparatus of Claim 1 wherein the at least one input heat transfer element is hollow, the apparatus further including a material within the input heat transfer element to transfer heat between the input heat transfer element and the output heat transfer element.

9. The apparatus of Claim 1 further comprising a temperature monitor for monitoring a temperature of one of said heat transfer elements.

10. The apparatus of Claim 1 wherein said one at least one input heat transfer element is hollow, the apparatus including an inlet port permitting heat transfer material to flow into the hollow interior of the input heat transfer element and an outlet port to remove material from the hollow interior of the input heat transfer element to transfer heat from the input heat transfer element exterior of the apparatus.

11. The apparatus of Claim 1 further comprising a removable handle to move said apparatus.

12. A method for rapidly changing the temperature of a mass of product, comprising the steps of:

placing at least one input heat transfer element within the mass of product; and

exposing at least one output heat transfer element in thermal contact with the at least one input heat transfer element to an ambient temperature environment to transfer

thermal energy between the product mass and ambient temperature environment.

13. The method of Claim 12 further comprising the step of inserting a plurality of said input heat transfer elements within the mass of product.

14. The method of Claim 12 further comprising the step of removing said at least one input heat transfer element from said at least one output heat transfer element to facilitate cleaning.

15. The method of Claim 12 further comprising the step of inserting said at least one input heat transfer element through a slot formed in a lid for a pan containing the mass of product to insert said at least one heat transfer element into the mass of product.

16. The method of Claim 1 further comprising the step of passing a heat transfer medium through a hollow interior of said one input heat transfer element to transfer heat to the heat transfer medium.

17. The method of Claim 12 further comprising the step of grasping the at least one input heat transfer heat element with a removable handle.

18. The method of Claim 12 wherein the step of placing at least one input heat transfer element within the mass of product includes the step of placing the at least one input heat transfer element within a mass of food.

19. The method of Claim 12 further comprising a step of providing a visual indication when the at least one

